

## CLAIMS:

1. A method of encoding an audio signal (x), the method comprising the steps of:  
providing a respective set of sampled signal values for each of a plurality of sequential  
segments;  
analysing the sampled signal values to generate one or more sinusoidal components for each  
5 of the plurality of sequential segments;  
linking sinusoidal components across a plurality of sequential segments;  
generating sinusoidal codes comprising tracks of linked sinusoidal components for each of  
the plurality of sequential segments wherein each track comprises a frequency and amplitude  
for a sinusoidal component in a starting segment of a track, and wherein selected tracks do  
10 not include a phase for said starting segment; and  
generating an encoded audio stream including said sinusoidal codes.
2. A method according to claim 1 wherein said selected tracks include an  
indicator that no phase is included for said starting segment.  
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3. A method according to claim 1 wherein said selected tracks are less than 5  
segments in length.
4. A method according to claim 1 wherein said selected tracks are less than 40ms  
20 in length.
5. A method according to claim 1 wherein said selected tracks represent non-  
tonal components of an audio signal.
- 25 6. A method according to claim 1 wherein said selected tracks represent a  
component of a voiced time interval in said audio signal.
7. A method according to claim 1 wherein said selected tracks represent a  
component of a noisy interval in said audio signal.

8. A method according to claim 1 in which each track comprises a frequency and amplitude difference for each sinusoidal component in a subsequent continuation segment of said track.

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9. Method of decoding an audio stream, the method comprising the steps of: reading an encoded audio stream including sinusoidal codes comprising tracks of linked sinusoidal components for each of the plurality of sequential segments, wherein each track comprises a frequency and amplitude for a sinusoidal component in a starting segment of a track, and wherein selected tracks do not include a phase for said starting segment; generating for said selected tracks a random start phase; and employing said sinusoidal codes to synthesize said audio signal including re-constructing sinusoidal components across a plurality of sequential segments.

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10. A method as claimed in claim 9 wherein said generating step comprises generating a random phase for each sinusoidal component of said selected tracks.

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11. Audio coder arranged to process a respective set of sampled signal values for each of a plurality of sequential segments of an audio signal (x), said coder comprising:...

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an analyser arranged to analyse the sampled signal values to generate one or more sinusoidal components for each of the plurality of sequential segments; a linker arranged to link sinusoidal components across a plurality of sequential segments; a component arranged to generate sinusoidal codes comprising tracks of linked sinusoidal components for each of the plurality of sequential segments wherein each track comprises a frequency and amplitude for a sinusoidal component in a starting segment of a track, and wherein selected tracks do not include a phase for said starting segment; and a bit stream generator for generating an encoded audio stream including said sinusoidal codes.

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30 12. Audio player, comprising:

means for reading an encoded audio stream including sinusoidal codes comprising tracks of linked sinusoidal components for each of the plurality of sequential segments, wherein each track comprises a frequency and amplitude for a sinusoidal component in a starting segment of a track, and wherein selected tracks do not include a phase for said starting segment;

a phase generator arranged to generate for said selected tracks a random start phase; and  
a synthesizer employing said sinusoidal codes to synthesize said audio signal including re-  
constructing sinusoidal components across a plurality of sequential segments.

5     13.             Audio system comprising an audio coder as claimed in claim 11 and an audio  
player as claimed in claim 12.

10     14.             Audio stream comprising sinusoidal codes representative of at least a  
component of an audio signal, said codes comprising tracks of sinusoidal components linked  
across said plurality of sequential segments, wherein each track comprises a frequency and  
amplitude for a sinusoidal component in a starting segment of a track, and wherein selected  
tracks do not include a phase for said starting segment.

15     15.             Storage medium on which an audio stream as claimed in claim 14 has been  
stored.